

- (ii) Energise pressure impulse engine to eject fluid drop
- (iii) De-energise shutter to seal/clean nozzle exit
- (iv) Energise solid state semiconductor laser (or electronic light valve shutter)
- (v) Energise shear action rotation to track eject drop
- 5 (vi) De-energise light valve and shear action laser array rotation to facilitate fly-back to start sequence over.

Preferably, the plurality of droplets comprise at least one droplet of one material and at least one droplet of another material.

10

The volume of each droplet is typically between 1 picolitre and 1 microlitre. This enables the final shape of a device to be accurately controlled during the formation thereof, and enables a wide variety of different shapes of devices to be formed.

- 15 The present invention will now be described by way of illustration only and with reference to the accompanying Figures in which:

*BRIEF DESCRIPTION OF THE DRAWINGS*

Figure 1 shows three deposition heads directed towards a coincident drop site on a print surface;

- 20 Figure 2 shows an array of deposition heads;

Figure 3 shows a cross-sectional view of a deposition head in combination with a UV light source;

Figure 4 shows a cross-sectional view of a resistor;

Figure 5 shows a selection of profiles for a resistor;

- 25 Figure 6 shows a cross-sectional view of a capacitor;

Figure 7a shows a schematic diagram of an inductor;

Figure 7b shows a cross-section along line A-A in Figure 7a.

Figures 8a and 8b are cross-sectional views of a transistor;

Figure 9a shows a simple circuit for a capacitive sensor;

- 30 Figure 9b shows a cross-sectional view of a capacitive sensor;

Figure 10 shows a cross-section of a chemotransistor;

Figure 11 shows a cross-section of a solar cell;